

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
JEFFREY K. JACOBS
1303 EAST ALGONQUIN ROAD
SCHAUMBURG, IL 60196

IF NO RESPONSE IS NEEDED,
PLEASE INITIAL _____ DATE _____,
RETURN TO CAROL

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT AND
THE WRITTEN OPINION OF THE INTERNATIONAL
SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Applicant's or agent's file reference CE11765R	Date of mailing (day/month/year) 15 APR 2005
International application No. PCT/US04/26054	FOR FURTHER ACTION See paragraphs 1 and 4 below
Applicant MOTOROLA, INC.	International filing date (day/month/year) 11 August 2004 (11.08.2004)

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:
The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
1211 Geneva 20, Switzerland, Facsimile No.: +41 22 740 14 35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Wellington Chin Telephone No. 571-272-2600
--	---

Form PCT/ISA/220 (January 2004)

(See notes on accompanying sheet)

APR 19 2005
Schaumburg Docketing

APR 19 2005
Schaumburg Docketing

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference CE11765R	FOR FURTHER ACTION <small>see Form PCT/ISA/220 as well as, where applicable, item 5 below.</small>	
International application No. PCT/US04/26054	International filing date (<i>day/month/year</i>) 11 August 2004 (11.08.2004)	(Earliest) Priority Date (<i>day/month/year</i>) 17 September 2003 (17.09.2003)
Applicant MOTOROLA, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the Report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).



- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2.



Certain claims were found unsearchable (See Box No. II)

3.



Unity of invention is lacking (See Box No. III)

4.

With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5.

With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6.

With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 1



as suggested by the applicant.



as selected by this Authority, because the applicant failed to suggest a figure.



as selected by this Authority, because this figure better characterizes the invention.



- b. none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/26054

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04Q 7/00

US CL : 370/332; 455/437, 525, 560

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : Please See Continuation Sheet

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Please See Continuation Sheet

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2001/0030953 A1 (Chang) 18 October 2001(18.10.2001), page 1 para [0007], page 4	1-2
---	para [0058], page 5 para [0073]-[0076]	-----
Y	US 2003/0169705 A1 (Knisely et al) 11 September 2003 (11.09.2003), page 1 para [0006]-[0008]	1-2
X	"Interoperability Specification (IOS) for cdma2000 Access Network Interfaces Release C",	1-2
---	TIA/EIA, July 2003, TIA-2001-C, Part 3 Features, pp. 244-249	-----
Y	US 2003/0169705 A1 (Knisely et al) 11 September 2003 (11.09.2003), page 1 para [0006]-[0008]	1-2
A	US 2003/0223396 A1 (Tsai et al) 04 December 2003 (4.12.2003), para [0003]-[0009]	1-10
A	US 2004/0062221 A1 (Gopalakrishnan et al) 01 April 2004 (1.4.2004), pages 2-4 para [0013]-[0024]	1-10
A	US 2003/0156556 A1 (Puig-Oses et al) 21 August 2003 (21.08.2003), pages 2-5 para [0019]-[0052]	1-10

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

28 March 2005 (28.03.2005)

Date of mailing of the international search report

15 APR 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Wellington Chin

Telephone No. 571-272-2600

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/26054

Continuation of B. FIELDS SEARCHED Item 1:

370/320,329,331,332,335,336,352,395.2,395.21; 455/67.11,422.1,426.1,432.1,436,437,442,445,450,452.2,453,513,524,525,560

Continuation of B. FIELDS SEARCHED Item 2:

"Interoperability Specification (IOS) for cdma2000 Access Network Interfaces Release C", TIA/EIA, July 2003, TIA-2001-C

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
JEFFREY K. JACOBS
1303 EAST ALGONQUIN ROAD
SCHAUMBURG, IL 60196

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference CE11765R		Date of mailing (day/month/year) 15 APR 2005
FOR FURTHER ACTION See paragraph 2 below		
International application No.	International filing date (day/month/year)	Priority date (day/month/year)
PCT/US04/26054	11 August 2004 (11.08.2004)	17 September 2003 (17.09.2003)
International Patent Classification (IPC) or both national classification and IPC		
IPC(7): H04Q 7/00 and US Cl.: 370/332; 455/437, 525, 560		
Applicant		
MOTOROLA, INC.		

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Wellington Chin Telephone No. 571-272-2600
--	---

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US04/26054

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☐ in written format

☐ in computer readable form

c. time of filing/furnishing

☐ contained in international application as filed.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US04/26054

Box No. V Reasoned statement under Rule 43 *bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>1-10</u>	YES
	Claims <u>NONE</u>	NO
Inventive step (IS)	Claims <u>3-10</u>	YES
	Claims <u>1-2</u>	NO
Industrial applicability (IA)	Claims <u>1-10</u>	YES
	Claims <u>NONE</u>	NO

2. Citations and explanations:

Please See Continuation Sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US04/26054

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

Claims 1-2 lack an inventive step under PCT Article 33(3) as being obvious over Chang in view of Knisely et al.

Claim 1, Chang teaches a method for providing forward packet data service to mobile stations (MSs) in a mobile communication system (FIG. 8, page 1 paragraph [0007], page 5 paragraphs [0073]-[000076]) referenced by the Concurrent Service 80a of the MS to the Packet Data Service Node through the Source Base Station in a CDMA mobile communication system, the method comprising providing by a cell in the mobile communication system data transmission service via a forward link (FIG. 6, page 4 paragraph [0058]) referenced by the use of Cell Identifier parameter to establish the data transmission with the Source Base Station, indicating to an MS that the cell will not provide data transmission service to the MS via the forward link (FIG. 8, page 5 paragraphs [0073]-[000076]) referenced by the BS Ack ORDER message 80l from the Target Base Station to the MS which indicates the Source Base Station will not provide data transmission service. Chang does not teach a forward packet data channel (F-PDCH). Knisely teaches a Forward Packet Data Channel (page 1 paragraph [0007]) referenced by the Forward-Packet Data Channel transmission of data from the base station to the mobile station. It would have been obvious to employ the F-PDCH of Knisely to the forward packet service of Chang for the purpose of having the base station convey communication signals to and from mobile equipment.

Claim 2, Chang teaches wherein providing data transmission services comprises providing data transmission services to the MS (FIG. 8, page 3 paragraph [0033]) referenced by the concurrent service inclusive of packet services to the MS, and wherein indicating that the cell will not provide data transmission service to the MS comprises indicating by the cell that the cell will no longer provide data transmission service to the MS via the forward link (FIG. 8, page 5 paragraphs [0073]-[0076]) referenced by the BS Ack ORDER message 80l from the Target Base Station to the MS which indicates the Source Base Station will no longer provide data transmission service. Chang does not teach a forward packet data channel (F-PDCH). Knisely teaches a Forward Packet Data Channel (page 1 paragraph [0007]) referenced by the Forward-Packet Data Channel transmission of data from the base station to the mobile station. It would have been obvious to employ the F-PDCH of Knisely to the forward link of Chang for the purpose of having the base station convey communication signals to and from mobile equipment.

Claims 3-4 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest that the cell will not provide data transmission service to the mobile station via the F-PDCH comprises sending a channel assignment message to the MS that the cell does not support a F-PDCH nor is part of an active set.

Claims 5-10 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest sending an indication to the MS that the target cell is presently unavailable to provide data transmission service to the MS via the F-PDCH of the

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US04/26054

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

target cell.

Claims 1-10 the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.